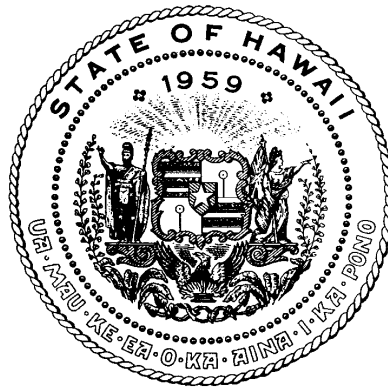


**2003 ANNUAL REPORT
BOARD OF CERTIFICATION OF OPERATING
PERSONNEL IN WASTEWATER
TREATMENT FACILITIES
IN COMPLIANCE WITH
SECTION 340B-12, HAWAII REVISED STATUTES**



**CHAPTER 61 OF TITLE 11
ADMINISTRATIVE RULES
ADOPTED ON OCTOBER 10, 1981
GOVERNS THE BOARD OF CERTIFICATION**

**PREPARED BY:
BOARD OF CERTIFICATION
STATE OF HAWAII**

DECEMBER 2003

**BOARD OF CERTIFICATION OF OPERATING PERSONNEL
IN WASTEWATER TREATMENT PLANT FACILITIES**

EXECUTIVE SUMMARY

The Board of Certification of Operating Personnel in Wastewater Treatment Plants (hereafter, the Board) conducted six (6) meetings during the year.

Operator certification examinations were administered by Board members statewide in February and August to 117 operators, with 36 successfully passing the examinations, for an overall passing rate of 31 percent. Hawaii's 2003 passing rate was higher (31 vs. 22 percent) than the previous year. The passing rates for Grades 3 and 4 were typically lower than for Grades 1 and 2. Passing rates for each grade have fluctuated over the years.

There are presently a total of 426 certified wastewater treatment plant operators in Hawaii. 420 have permanent certifications and six (6) have conditional operator certificates.

The Board and the Statewide Wastewater Operator Training Center Board of Directors have been meeting annually as a means of improving both the training and certification programs.

Significant board actions include:

- Reviewing all applications for examinations;
- Conducting two examinations annually;
- Classifying treatment plants;
- Evaluating applications for issuing reciprocity certifications;
- Evaluating college transcripts and granting continuing-educational-units;
- Implementing HAR Chapter 11- 61, rules for the mandatory certification of personnel in wastewater treatment plants;
- Issuing permanent certificates; and
- Reviewing the operating budget.

Funding Source for the Board

Act 238, SLH 1999 amended Chapter 340B, Hawaii Revised Statutes (HRS) which established the Wastewater Treatment Certification Board (WTCB) Special Fund. The revenues for this fund are generated from monies collected for registration, renewal, reciprocity and temporary certificate fees and are to be used specifically for defraying the costs of the operations of the Board.

2003 ANNUAL REPORT

BOARD OF CERTIFICATION OF OPERATING PERSONNEL IN WASTEWATER TREATMENT FACILITIES

INTRODUCTION

Effective operation and maintenance of wastewater treatment works are essential to prevent pollution of the waters of the state. Also, efficient management of wastewater treatment works is an important economic asset to the public, to county and state officials, and to operators. Furthermore, certification of wastewater treatment works operators assures the employment of personnel competent to provide proper operation and maintenance, and efficient management of wastewater treatment works.

ORGANIZATION

This Annual Report summarizes the Board's activities and accomplishments during 2003. It also provides information about the Board's organizational structure.

Organizational Structure

Members of the Board are appointed to a four-year term. The Board is comprised of the following members:

Allen Souza	- Chair, Operator, County of Maui
Marshall Lum	- Secretary, State Department of Health
Wayne Salas	- Operator, City & County of Honolulu
Myron Nomura	- Professional Engineer in private practice
Mansfield Dacay	- Operator, County of Kauai
Charles Dawrs	- Operator, County of Hawaii
P.Y. Yang	- Ph.D., University of Hawaii
Victor Moreland	- Operator, private sector
Eassie Miller	- HWEA representative

The Board is assisted by Joslynne Camlin, clerk/typist, who is assigned to the Wastewater

Branch, State Department of Health. Additionally, Harold Yee, Chief of the Wastewater Branch, State Department of Health oversees the funding of the Board.

Board Meetings During 2003

During the calendar year, the Board held six meetings on:

January 8-9
March 14

May 9
July 10-11

September 5
November 7

Summary of Certification Examinations

The Board conducted two examinations statewide for all grades of wastewater treatment plant operators during 2003. The first in February 2003 and the second in August 2003. The results of these examinations are depicted in the following tables:

February 2003 Examination

Grade	Pass	Total	Passing %
1	2	4	50
2	5	8	63
3	1	8	13
4	4	25	16
Total	12	45	27

August 2003 Examination

Grade	Pass	Total	Passing %
1	8	10	80
2	5	11	45
3	6	19	32

4	5	32	16
Total	24	72	33

COMPARISON OF PASSING PERCENTAGES

Statewide

Date of Exam	Grade 1	Grade 2	Grade 3	Grade 4
August 2003	80	45	32	16
February 2003	50	63	13	16
August 2002	73	53	17	6
February 2002	50	25	5	20
August 2001	69	20	4	8
February 2001	33	20	22	5
August 2000	70	57	23	31
February 2000	38	31	46	15

STATISTICS:

A total of 117 operators took the examination in 2003 of which 36 passed for an overall passing rate of 31 percent. As shown in the above table, the passing percentages for all grades have been fluctuating during the past four years.

Passing percentages for Grade 1 ranges from 33% to 80%, Grade 2 ranges from 20% to 63%, Grade 3 ranges from 4% to 46%, and Grade 4 ranges from 5% to 31%.

Passing percentages for Grades 3 and 4 were particularly low during the year as compared to past years for no apparent reasons.

ASSOCIATION OF BOARD OF CERTIFICATION EXAMINATION (ABC) PASSING PERCENTAGE COMPARISON

Hawaii's vs National Average	Grade 1	Grade 2	Grade 3	Grade 4
Hawaii's 2003 Average	67	53	26	16
Hawaii's 2002 Average	67	41	10	14
Hawaii's 2001 Average	54	20	12	7
Hawaii's 2000 Average	56	44	37	23
National 2002 Average	67	55	35	42

The average passing rates for Grades 1 and 2 in 2003 are comparable to past years and the national average. The passing rates for Grades 3 and 4 are below the national average.

Operators have been encouraged to enroll in correspondence courses provided by California State University Sacramento (CSUS) and in courses offered by the Statewide Wastewater Operator Training Center. Only a minority of the operators have enrolled and completed the CSUS correspondence courses and only a fraction of the operators are attending classes offered by the Training Center.

The ABC Certification Examinations questions reference the courses offered by CSUS. Analysis has proven that the majority of the operators who have completed the CSUS courses and have taken courses offered by the training center are passing the ABC Certification examinations.

Statewide Wastewater Operator Training Center

The State Department of Health established the training center 15 years ago in September 1988. During 2003, the training center conducted 67 training sessions statewide to 450 registrants.

Training courses included introductory basic wastewater courses to more complex advanced courses such as activated sludge, sludge conditioning and anaerobic digestion. Three new courses were added entitled: OSHA Process Management Course, Industrial Hydraulic Technology, and Primedia's Mechanical Maintenance Course.

The Board of Directors of the Training Center has placed great emphasis in improving the quality of the training program. During recent years the following new programs were purchased: maintenance training videotapes and textbooks from Primedia Inc.; "Pumps" CD-ROM from Water Environment Federation; "Solids Handling" interactive CD-ROM, and a new study guide for the certification examination refresher course. Additional desktop computers were purchased for the Counties of Kauai and Maui.

An analysis of all examinees who have successfully completed wastewater treatment plant operator courses with the training center have significantly better results than examinees who did not participate in the training program.

Joint Meeting

The Board of Certification meets on an annual basis in November with the Board of Directors of the Statewide Wastewater Operator Training Center to discuss issues pertaining to the training and certification program. These annual meetings have been beneficial and will be continued. The Boards agree the passing percentages of the exams could improve. The counties, especially the outer islands, have been encouraged to implement additional training and refresher courses for their personnel.

As discussed in the previous section, the Training Center recently purchased computer hardware along with the "Solids Handling" and "Pumps" CD-ROM courses. Counties have reported that their operators are utilizing these new interactive training CD-ROMs.

WASTEWATER BRANCH, DEPARTMENT OF HEALTH

The Construction and Operations Section of the Wastewater Branch has assisted the Board in providing the information and vital data of all wastewater treatment plants (WWTP) requiring classification. The Board currently maintains a computer file of 175 WWTPs in the state.

OTHER SERVICES PROVIDED BY THE BOARD OF CERTIFICATION

Services	2000	2001	2002	2003
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Total number of operators:				
Permanent Certifications (Two year renewals)	461	466	460	420
Conditional Certifications (Two year renewals)	14	14	8	6
Requests for temporary certificates	6	12	3	9
Requests for reciprocity certificates	6	7	3	7
Evaluation of college transcripts	21	15	14	12
Classification of Treatment Plants	12	28	14	15

A number of wastewater treatment plant operators have completed college/university courses. The Board evaluated courses related to the wastewater profession and awarded appropriate “continuing educational unit” (CEU) credit to operators applying for exams. CEUs are required as part of the educational requirements for certification examinations in addition to work experience. The recent amendments to HAR Chapter 11-61 changed the renewal period for active operator certificates to every two years instead of annually. This change allows the Board to reduce paperwork and costs for annual renewals and is also compatible with other member states of the Association of Board of Certification (ABC).

SIGNIFICANT BOARD ACTIONS

The primary goal of the certification program is to ensure that all wastewater treatment plants are operated by qualified personnel. During the year, the Board achieved the following objectives:

1. Continued to review and determine the number of CEUs credited for satisfactory completion of new training courses offered by the training center and other institutions;
2. Continued to classify or reclassify wastewater treatment facilities throughout the state;
3. Resolved concerns submitted by operators regarding applications and qualifications for examination;
4. Continued efforts to inform operators of the Board's functions and decisions via the Board's minutes of the meetings. Meetings are open to any operator interested in making a presentation before the Board;
5. Continued utilizing ABC Services for the development and scoring of the bi-annual certification examinations. The ABC Services standardized examinations consist of two components: 90 core questions and 10 supplementary questions. The core questions must be used by each client. The 10 supplementary questions are selected by the Board from a pool of 25 questions provided by ABC Services;

6. Evaluated six applications for reciprocity from out-of-state operators;
7. Held an annual joint meeting with the Board of Directors of the Statewide Wastewater Operator Training Center which was considered beneficial for both Boards. Proposals from these annual joint meetings have improved the training and certification programs;
8. Continued to provide information of the certification program, lists of CEUs/training earned, issuance of certificates and other matters such as the renewal of licenses;
9. Reviewed and updated all forms and related instructional sheets;
10. Implemented recent amendments to Hawaii Administrative Rules (HAR), Title 11, Chapter 61, Mandatory Certification of Operating Personnel in Wastewater Treatment Facilities, dated January 20, 2002; and
11. Reviewed and approved the Hawaii Environment Association's Pre-Conference Workshop for the 25th Annual Conference on January 29-31, 2003. One (1) continuing-educational-unit was granted to each participant attending the pre-conference workshop "Handling Storm Related Peak Flows."

Schedule of Meetings for Year 2004

The Board has scheduled six (6) meetings for the coming calendar year in:

January	May	September
March	July	November

General business to be conducted at these meetings include:

1. Providing an informational meeting for operators in attendance;
2. Reviewing and processing applications for certification examinations and discussing the results of the exams;
3. Previewing and preparing responses to correspondence received from operating personnel and other related agencies;
4. Reviewing and approving operator applications for temporary certificates; and
5. Reviewing and issuing reciprocity certifications to qualifying operators from other states.

Expenditures During the Year (July 2002 to June 2003):

Object Code	Title	Cost
3020	ABC Examinations	\$4,226
3510	Membership Dues	900
4210	Airline Coupons	2538
4310	Travel Per Diem	2514
4610	Car Rental	400
	Total	\$10,577

Funding Source for the Board

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